

PRIORITY

TOP SECRET 132107Z

1964 JUL 13 22 46Z

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14 JUL 1964
25X1

HFS

CJS

OTC

PMS

Grace (File)

1. BINARY CLOCK ERRORS M-1006-1 AND M-1006-2

A. THE BINARY CLOCK HAD AN ERRATIC DRIFT THAT MADE THE BINARY DATA BLOCK READINGS DIFFICULT AND TIME CONSUMING TO CORRECT. LINEAR INTERPOLATIONS WERE USED TO OBTAIN GREENWICH CIVIL TIME OF S/I EXPOSURES.

B. THE TOTAL DRIFT OF THE CLOCK WAS 165 MILLISECONDS WITH THE HIGHEST DRIFT OCCURRING DURING THE FIRST AND SECOND DAYS AND THE LOWEST DRIFT RATE ON THE FINAL DAY OF OPERATION. BECAUSE THE RATE WAS ERRATIC AND ON OCCASION REVERSED ITSELF, THE TIMES OBTAINED WILL BE IN ERROR. THIS ERROR WILL INFLUENCE THE FINAL ACCURACY OF THE FRAME EPHEMERIS.

C. THE MASTER CAMERA BINARY DATA BLOCK FAILED ON FRAME 102 OF PASS 103; THERE WERE INTERMITTENT DATA BLOCKS AVAILABLE AFTER THE ABOVE FAILURE, BUT THEY WERE SO INFREQUENTLY SPACED THAT THEY COULD NOT BE USED FOR ANALYSIS.

D. NO TIME CAN BE GIVEN FOR THE SLAVE CAMERA UNTIL FRAME 17 OF PASS 3 BECAUSE THE BINARY DATA BLOCK FAILED TO REGISTER.

25X1

TOP SECRETGROUP 1
Excluded from automatic
downgrading and
declassification

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2. BINARY CLOCK ERRORS ON M-1007-1 AND M-1007-2

A. THE BINARY CLOCK SHOWED PRONOUNCED, ERRATIC DRIFT WITH A TOTAL OF 450 MILLISECONDS AND A MAXIMUM OF 199 MILLISECONDS IN ONE DAY. AGAIN, THESE ERRORS HAVE CAUSED TIME DELAYS IN VARIOUS PROCESSES, AND THE INABILITY TO ACCOMPLISH ACCURATE DISTRIBUTION OF ERROR WILL INFLUENCE ACCURACY OF FINAL EPHEMERIS.

B. LIGHT NUMBER 18 WENT OFF ON FRAME 62 OF PASS 104 AND REMAINED OFF THROUGHOUT THE REMAINDER OF THE MISSION. LIGHT NUMBER 21 WENT OFF ON FRAME 53 OF PASS 52 AND REMAINED OFF FOR DURATION OF MISSION.

T O P S E C R E T

--END OF MESSAGE--